

INIT

| login (server) | login (client) |
|--|---|
| | < ----- {"nickname": str} |
| (first player) {"client_id": 1; "OK": true} -> first login request | ----- > |
| (already taken nickname) {"OK": false; "message": "Questo nickname è già stato usato"} | |
| (not first player) {"client_id": int; "leaderCards": ["card1": int, "card2": int, "card3": int, "card4": int]; "OK": true} | ----- > |
| | < ----- {"chosenLeaderCards": ["card1": int, "card2": int]} |

| first login (server) | first login (client) |
|--|---|
| | < ----- {"numOfPlayers": int} |
| (<1 >4) {"OK": false; "message": "Numero inserito non valido"} | ----- > |
| (1-4) {"leaderCards": ["card1": int, "card2": int, "card3": int, "card4": int]; "OK": true} | ----- > |
| | < ----- {"chosenLeaderCards": ["card1": int, "card2": int]} |

TURN ACTION

| buy card(server) | buy card (client) |
|---|--|
| | < ----- {"buyCard": { "deckRow": int; "deckColumn": int; "warehouse": boolean}} |
| (no available slots) {"OK": false; "message": "Non hai slot liberi"} | ----- > |
| (not enough resources) {"OK": false; "message": "Non hai abbastanza risorse"} | ----- > |
| (empty chosen deck) {"OK": false; "message": "Hai scelto un mazzetto vuoto"} | ----- > |
| (on ok) {"OK": true; "bought_card": int} | |
| (more available slots) {"OK": true; "availableSlots": {"slot1": int, "slot2": int, "slot3": int}} | ----- > |
| | < ----- {"chosenSlot": int} |
| {"OK": true; "bought_card": int} | |
| notifyAll {"buy_card_change": { "client_id": int; "bought_card": int; "chosen_slot": int}} | ----- > |

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notifyAll {"removed_deck_card": {
    "row": int
    "column": int;
    "empty": boolean;
    "new_card": int}}
notifyAll {"decreased_resource": {
    "client_id": int;
    "resource": Resource;
    "amount": int;
    "warehouse": boolean}}

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| take marble (server) | take marble (client) |
|--|--|
| | < ---- {"takeMarble": {"row: boolean; "index": int}} |
| {"marbles": {"marble1": Marble; "marble2": Marble; "marble3": Marble}} | ---- > |
| notifyAll {"taken_market_marble": {"row": boolean; "index": int}} | ---- > |

| use marble (server) | use marble (client) |
|--|----------------------------------|
| | < ---- {"use_marble": Marble} |
| (if WhiteMarble and 2 active WhiteConversionCard) | |
| {"whiteConversionCards": [{"card1": int; "card2": int}]} | ----> |
| | < ---- {"chosenLeaderCard": int} |
| notifyAll {"increased_faith_points": {"client_id": int, "faithPoints": 1} | ----> |
| notifyAll {"increased_warehouse": { | ----> |
| "client_id": int; | |
| "resource": Resource; | |
| "depot": int}} | |

| switch (server) | switch (client) |
|--|---|
| <p>(switch not possible)</p> <pre>{ "OK": false; "message": "Non puoi effettuare questo scambio" }</pre> | <pre>< ---- { "switch": ["depot1": int; "depot2": int] }</pre> |
| <p>(on ok)</p> <pre>{ "OK": true; "switch_depots": { "new_resource1": Resource; "new_amount1": int; "new_resource2": Resource; "new_amount2": int } }</pre> | <pre>----- ></pre> |
| <p>notifyAll { "switch_depots": {</p> <pre> "client_id": int; "depot1": int; "new_resource1": Resource; "new_amount1": int; "depot2": int; "new_resource2": Resource; "new_amount2": int }</pre> | <pre>----- ></pre> |

| production power development card (server) | production power development card (client) |
|--|--|
| | < ----- {"activate_production": { "chosenCard": int; "warehouse": boolean}} |
| (not existing card) {"OK": false; "message": "Non possiedi alcuna carta in questo slot"} | ----- > |
| (not enough resources) {"OK": false; "message": "Non hai abbastanza risorse"} | ----- > |
| (on ok) {"OK": true} | ----- > |

| basic production power (server) | basic production power (client) |
|---|--|
| | < ----- {"activate_basic_production": { "resourceDeleted1": Resource; "resourceDeleted2": Resource; "resourceObtained": Resource; "warehouse": boolean}} |
| (not enough resources) {"OK": false; "message": "Non hai abbastanza risorse"} | ----- > |
| (on ok) {"OK": true} | ----- > |

| additional production power (server) | additional production power (client) |
|--|---|
| | < ----- {"activate_additional_production": { "chosenLeaderCard": int; "resourceObtained": Resource; "warehouse": boolean}} |
| (card is not active or is not an AdditionalProductionPowerCard) {"OK": false; "message": "Non puoi utilizzare il potere di produzione extra"} | ----- > |
| (on ok) {"OK": true} | ----- > |

| end production power (server) | end production power (client) |
|--|------------------------------------|
| | < ----- {"end_produciton_power": } |
| (no production power were casted) {"OK": false; "message": "Non hai attivato alcun potere di produzione"} | ----- > |
| (on ok) {"OK": true; "faithPointsAcquired": int} | ----- > |
| {"resources_flow": { "resource": Resource; "warehouse_amount": int; "strongbox_amount": int}} | ----- > |
| notifyAll {"increased_faithPoints": {"client_id": int; "amount": int}} | ----- > |
| notifyAll {"new_resource_amounts": { "client_id": int; "resource": resource; "new_warehouse_amount": int; "new_strongbox_amount": int}} | ----- > |

| leader card activation (server) | leader card activation (client) |
|--|--|
| | < ----- {"leaderCard_activation": int} |
| (card already active) {"OK": false; "message": "Hai già attivato questa carta"} | ----- > |
| (card previously discarded) {"OK": false; "message": "Hai scartato questa carta precedentemente"} | ----- > |
| (not enough resources) {"OK": false; "message": "Non hai abbastanza risorse per attivare questa carta"} | ----- > |
| (not enough cards) {"OK": false; "message": "Hai bisogno di più carte per attivare questa carta"} | ----- > |
| (on ok) {"OK": true; "leaderCard": int} | ----- > |
| notifyAll {"activated_leader_card": { "client_id": int; "leaderCard": int}} | ----- > |

| leader card discard (server) | leader card discard (client) |
|---|-------------------------------------|
| | < ----- {"leaderCard_discard": int} |
| (card already active) {"OK": false; "message": "Hai attivato questa carta precedentemente"} | ----- > |
| (card previously discarded) {"OK": false; "message": "Hai già scartato questa carta "} | ----- > |
| (on ok) {"OK": true; "faithPoints": 1} | ----- > |
| notifyAll {"discarded_leader_card": { "client_id": int; "leaderCard": int}} | ----- > |
| notifyAll {"increased_faithPoints": {"client_id": int; "faithPoints": 1}} | ----- > |

CLIENT REQUEST

| current player (server) | current player (client) |
|------------------------------|-------------------------|
| | < ----- {"isMyTurn": } |
| {"isCurrentPlayer": boolean} | ----- > |

| available switch (server) | available switch (client) |
|--|--------------------------------|
| | < ----- {"available_switch": } |
| (not available switches) {"OK": false; "message": "Non puoi effettuare scambi di deposito"} | ----- > |
| (on ok) {"OK": true; "availableSwitches": { "switch1": ["depot1": int; "depot2": int]; "switch2": ["depot1": int; "depot2": int]; "switch3": ["depot1": int; "depot2": int]}} | ----- > |

| available cards (server) | available cards (client) |
|---|-------------------------------|
| (not available cards) | < ----- {"available_cards": } |
| {"OK": false; "message": "Non puoi comprare nessuna carta"} | ----- > |
| (on ok) | |
| {"OK": true; "availableCards": { | ----- > |
| "card1": int; | |
| "card2": int; | |
| "card3": int; | |
| "card4": int; | |
| "card5": int}} | |

SERVER NOTIFY

| buy card change (server) | buy card change (client) |
|--------------------------|--------------------------|
| {"buy_card_change": { | ----- > |
| "client_id": int; | |
| "bought_card": int; | |
| "chosen_slot": int}} | |

| removed deck card (server) | removed deck card (client) |
|----------------------------|----------------------------|
| {"removed_deck_card": { | ----- > |
| "row": int | |
| "column": int; | |
| "empty": boolean; | |
| "new_card": int}} | |

| decreased resource (server) | decreased resource (client) |
|-----------------------------|-----------------------------|
| {"decreased_resource": { | ----- > |
| "client_id": int; | |
| "resource": Resource; | |
| "amount": int; | |
| "warehouse": boolean}} | |

| taken market marble (server) | taken market marble (client) |
|---|------------------------------|
| {"taken_market_marble": {"row": boolean; "index": int}} | ----- > |

| increased faith points | increased faith points |
|--|------------------------|
| {"increased_faith_points": {"client_id": int, "faithPoints": int}} | ----- > |

| increased warehouse (server) | increased warehouse (client) |
|------------------------------|------------------------------|
| {"increased_warehouse": { | ----- > |
| "client_id": int; | |
| "resource": Resource; | |
| "depot": int}} | |

| switch depots (server) | switch depots (client) |
|--|------------------------|
| <pre> {"switch_depots": { "client_id": int; "depot1": int; "new_resource1": Resource; "new_amount1": int; "depot2": int; "new_resource2": Resource; "new_amount2": int}}</pre> | ----- > |

| new resource amount (server) | new resource amount (client) |
|--|------------------------------|
| <pre> {"new_resource_amount": { "client_id": int; "resource": resource; "new_warehouse_amount": int; "new_strongbox_amount": int}}</pre> | ----- > |

| activated leader card (server) | activated leader card (client) |
|---|--------------------------------|
| <pre> {"activated_leader_card": { "client_id": int; "leaderCard": int}}</pre> | ----- > |

| discarded leader card (server) | discarded leader card (client) |
|---|--------------------------------|
| <pre> {"discarded_leader_card": { "client_id": int; "leaderCard": int}}</pre> | ----- > |

| end game (server) | end game (client) |
|---|-------------------|
| <pre> {"end_game": {"position": int; "victoryPoints": int}}</pre> | ----- > |

| connection lost (server) | connection lost (client) |
|--|--------------------------|
| <pre> {"connection_lost": {"client_id": int}} -> end game</pre> | ----- > |